

Pawnee County

Estimated Economic Contribution of Agriculture, Food, and Food Processing Sectors 6/27/2019

Using the most recent IMPLAN data available (2017) adjusted for 2019, 17 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Pawnee County economy.¹

These 17 sectors have a total direct output of approximately **\$245.4 million** and support **619 jobs** in Pawnee County. Running the model for all 17 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Pawnee County Economy							
Contribution Type ²	Employment	% Employment	Total Value Added ³	Total Value Added % of Gross Regional Product ⁴	Output⁵		
Direct Effect	619.2	14.42%	\$53,768,601	20.08%	\$245,414,527		
Indirect Effect	160.9	3.75%	\$13,486,353	5.04%	\$25,677,634		
Induced Effect	119.3	2.78%	\$8,222,356	3.07%	\$15,214,811		
Total Effect	899.3	20.95%	\$75,477,310	28.19%	\$286,306,972		

As shown in the above table, agriculture, food, and food processing sectors support **899 jobs**, or **20.95%** of the entire workforce in the county.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 17 agriculture, food, and food processing sectors is approximately \$75.5 million, or 28.19% of the GRP.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting: http://www.implan.com/index.php?option=com_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value added = labor income + indirect business taxes + other property type income.

 $^{4\} GRP = final\ demand\ of\ households + governments\ expenditures + capital + exports\ -\ imports\ -\ institutional\ sales.$

⁵ Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **419 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Pawnee County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment				
Sector	Total Employment	Total Output		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	419.1	\$124,738,643		
Grain farming	74.0	\$62,006,100		
Meat processed from carcasses	42.8	\$20,519,586		
Wholesale trade	42.2	\$8,375,179		
Support activities for agriculture and forestry	31.5	\$782,359		
Real estate	26.4	\$3,914,073		
Truck transportation	24.6	\$3,963,112		
Limited-service restaurants	17.9	\$1,229,860		
Monetary authorities and depository credit intermediation	16.4	\$3,634,731		
Other animal food manufacturing	14.3	\$16,902,813		

The beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector directly contributes approximately \$124.7 million to the Pawnee County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output				
Sector	Total Employment	Total Output		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	419.1	\$124,738,643		
Grain farming	74.0	\$62,006,100		
Meat processed from carcasses	42.8	\$20,519,586		
Other animal food manufacturing	14.3	\$16,902,813		
Oilseed farming	6.7	\$15,243,950		
Wholesale trade	42.2	\$8,375,179		
Owner-occupied dwellings	0.0	\$4,109,860		
Truck transportation	24.6	\$3,963,112		
Real estate	26.4	\$3,914,073		
Monetary authorities and depository credit intermediation	16.4	\$3,634,731		

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Pawnee County economy.

All Agriculture, Food, and Food Processing Sectors				
Sector	Total Employment	Total Output		
Oilseed farming	6.7	\$15,243,949.89		
Grain farming	74.0	\$62,006,099.70		
Vegetable and melon farming	1.2	\$240,024.72		
Cotton farming	1.9	\$457,945.79		
All other crop farming	9.8	\$1,684,505.82		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	419.1	\$124,738,639.83		
Poultry and egg production	0.5	\$473,890.24		
Animal production, except cattle and poultry and eggs	0.8	\$192,172.29		
Commercial logging	1.2	\$30,686.39		
Commercial hunting and trapping	1.1	\$22,000.50		
Support activities for agriculture and forestry	31.5	\$782,359.42		
Other animal food manufacturing	14.3	\$16,902,812.96		
Meat processed from carcasses	42.8	\$20,519,586.56		
Bread and bakery product, except frozen, manufacturing	3.9	\$439,326.64		
Frozen cakes and other pastries manufacturing	0.2	\$35,995.77		
Farm machinery and equipment manufacturing	3.5	\$1,083,358.29		
Veterinary services	6.7	\$561,170.40		

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Pawnee County, the retail sector was omitted.